

1632

Our Reference No. 6580-270
DT05 Rec'd PCT/PTO 03 SEP 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)
)
Cecil W. Forsberg, Serguei Golovan,)
John P. Philips)
)
Serial No. **09/926,375**)
)
Filed: **April 20, 2000**)
)
For: **Transgenic Animals**)
Expressing Salivary)
Proteins)

Art Group Unit: **Unknown**

Examiner: **Unknown**

RECEIVED
TECH CENTER 1600/2900
02 AUG 30 PM 1:15

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

The Commissioner of Patents & Trademarks
Washington, D.C. 20231
U.S.A.

Dear Sir:

FILING OF AN INFORMATION DISCLOSURE STATEMENT

In accordance with 37 CFR 1.97 and 1.98, and in recognition of the duty of disclosure set forth in 37 CFR 1.56, Applicant hereby submits an Information Disclosure Statement on Form PTO-1449 containing a listing of patents and other publications of which Applicant is aware. Applicant is also submitting the references listed on the Information Disclosure Statement.

All of the patents and publications submitted herewith are in the English language and accordingly a concise explanation of the relevance of the documents is not required.

The Examiner is requested to indicate consideration of these documents by initialling the appropriate column. Applicant reserves the right to contest the applicability of any of these documents as prior art against the subject application.

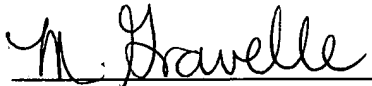
This Information Disclosure Statement is being filed within three months of the filing of the application or before the mailing date of a first Office Action on the merits; therefore, no fee is required.

If the Examiner has any questions concerning this Information Disclosure Statement, he is requested to contact the undersigned. If it is determined that this Information Disclosure Statement has been filed under the wrong rule, the Patent and Trademark Office is requested to consider this Information Disclosure Statement under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 02-2095.

If additional fees are required, please charge the fees to our Deposit Account No. 02-2095.

Respectfully submitted,

Cecil W. Forsberg et al.



Micheline Gravelle
Registration No. 40,261

Dated: August 29, 2002

Bereskin & Parr
Box 401, 40 King Street West
Toronto, Ontario
Canada M5H 3Y2

(416) 364-7311
Enclosures

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	10
-------	---	----	----

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³ Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1.	Abelson, P.H. 1999. A potential phosphate crisis. Science 283: 2015	
	2.	Altschul, S.F., Gish, W., Miller, W., Myers, E.W. and Lipman, D.J. 1990. Basic local alignment search tool. J. Mol. Biol. 215: 403-410.	
	3.	Ann, D.K. and Carlson, D.M. 1985. The structure and organization of a proline-rich protein gene of a mouse multigene family. J. Biol. Chem. 260: 15863-15872.	
	4.	AOAC 1984. Official Methods of analysis (14th Ed.).	
	5.	Ausbel, F.M., Brent, R., Kingston, R.E., Moore, D.D., Seidman, J.G., Smith, J.A. and Struhl, K. 1992. Short protocols in molecular biology. John Wiley & Sons.	
	6.	Barsh, G.S. and Epstein, C.J. 1989. Physical and genetic characterization of a 75-kilobase deletion associated with al, a recessive lethal allele at the mouse agouti locus. Genetics 121: 811-818.	
	7.	Bennick, A. 1982. Salivary proline-rich proteins. Mol. Cell Biochem. 45: 83-99.	
	8.	Bitar, K. and Reinhold, J.G. 1972. Phytase and alkaline phosphatase activities in intestinal mucosae of rat, chicken, calf, and man. Biochim. Biophys. Acta 268: 442-452.	
	9.	Burge, C. and Karlin, S. 1997. Prediction of complete gene structures in human genomic DNA. J. Mol. Biol. 268: 78-94.	
	10.	Burge, C.B. and Karlin, S. 1998. Finding the genes in genomic DNA. Curr. Opin. Struct. Biol. 8: 346-354.	
	11.	Carlson, D.M. 1993. Salivary proline-rich proteins: Biochemistry, molecular biology, and regulation of expression. Crit. Rev. Oral Biol. Med. 4: 495-502.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	12.	Carswell, S. and Alwine, J.C. 1989. Efficiency of utilization of the simian virus 40 late polyadenylation site: effects of upstream sequences. Mol. Cell Biol. 9: 4248-4258.	
	13.	Chi, T.H. and Crabtree, G.R. 2000. Inositol phosphates in the nucleus. Science 287: 1937-1939.	
	14.	Clark, A.J., Archibald, A.L., McClenaghan, M., Simons, J.P., Wallace, R. and Whitelaw, C.B.A. 1993. Enhancing the efficiency of transgene expression. Phil.Trans.R.Soc.Lond. B 330: 225-232.	
	15.	Clements, S., Mehansho, H. and Carlson, D.M. 1985. Novel multigene families encoding highly repetitive peptide sequences. J.Biol.Chem. 260: 13471-13477.	
	16.	Corring, T. 1980. Endogenous secretions in the pig. In Current concepts of digestion and absorption in pigs. Edited by A.G.Low and I.G.Partridge. National Institute for Research in Dairying. Reading. pp.136-150. Ed. Technical Bulletin 3.	
	17.	Cosgrove, D.J. 1980. Inositol phosphates. Their chemistry, biochemistry and physiology. Elsevier, Amsterdam.	
	18.	Cramer, A., Dawes, G., Rodriguez, E.Jr., Silver, S. and Stemmer, W.P.C. 1997. Molecular evolution of an arsenate detoxification pathway by DNA shuffling. Nature Biotechnol. 15: 436-438.	
	19.	Dassa, J., Marck, C. and Boquet, P.L. 1990. The complete nucleotide sequence of the <i>Escherichia coli</i> gene <i>appA</i> reveals significant homology between pH 2.5 acid phosphatase and glucose-1-phosphatase. J. Bacteriol. 172: 5497-5500.	
	20.	Denny, H.R. and Messervy, A. 1972. Surgical techniques for the extirpation of the submandibular salivary glands and the collection of salivary secretions in the pig. Vet.Rec. 90: 650-654.	
	21.	Dobrinsky, J.R., Johnson, L.A. and Rath, D. 1996. Development of a culture medium (BECM-3) for porcine embryos: Effect of bovine serum albumin and fetal bovine serum on embryo development. Biol.Reprod. 55: 1069-1074.	
	22.	Dvorakova, J. 1998. Phytase: Sources, preparation and exploitation. Folia Microbiol Prague. 43: 323-338.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 4 of 10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	23	Engelen, A.J., Vanderheeft, F.C., Randsdorp, P.H.G. and Smit, E.L.C. 1994. Simple and rapid determination of phytase activity. J.Aoac. Int. 77: 760-764.	
	24	Frandsen, R.D. and Spurgeon, T.L. 1992. Anatomy and physiology of farm animals. Lea & Febiger, Philadelphia.	
	25	Galfre, G. and Milstein, C. 1981. Preparation of monoclonal antibodies: strategies and procedures. Methods Enzymol. 73: 3-46.	
	26	Geyer, P.K. 1997. The role of insulator elements in defining domains of gene expression. Curr.Opin.Genet.Dev. 7: 242-248.	
	27	Gish, W. and States, D.J. 1993. Identification of protein coding regions by database similarity search. Nature Genetics 3: 266-272.	
	28	Golovan, S., Wang, G., Zhang, J. and Forsberg, C.W. 2000. Characterization and overproduction of the <i>Escherichia coli appA</i> encoded bifunctional enzyme which exhibits both phytase and acid phosphatase activities. Can.J. Microbiol. 46: 59-71.	
	29	Gordon, J.W., Scangos, G.A., Plotkin, D.J., Barbosa, J.A. and Ruddle, F.H. 1980. Genetic transformation of mouse embryos by microinjection of purified DNA. Proc. Natl. Acad. Sci. USA 77: 7380-7384.	
	30	Gorman, C., Padmanabhan, R. and Howard, B.H. 1983. High efficiency DNA-mediated transformation of primate cells. Science 221: 551-553.	
	31	Greiner, R. and Jany, K.-D. 1991. Characterization of a phytase from <i>Escherichia coli</i> . Herbsttagung der Gesellschaft für Biologische Chemie 372 (Abstract)	
	32	Greiner, R., Konietzny, U. and Jany, K. 1993. Purification and characterization of two phytases from <i>Escherichia coli</i> . Arch.Biochem.Biophys. 303: 107-113.	
	33	Hall, J., Hazlewood, G.P., Surani, M.A., Hirst, B.H. and Gilbert, H.J. 1990. Eukaryotic and prokaryotic signal peptides direct secretion of a bacterial endoglucanase by mammalian cells. J. Biol. Chem. 275: 19996-19999.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 5 of 10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	34.	Harayama, S. 1998. Artificial evolution by DNA shuffling. Trends Biotechnol. 16: 76-81.	
	35.	Harland, B.F. and Morris, E.R. 1995. Phytate: A good or a bad food component? Nutr.Res. 15: 733-754.	
	36.	Harlow, E. and Lane, D. 1988. Antibodies: a laboratory manual. Cold Spring Harbor Laboratory, New York.	
	37.	Heinoen, J.K. and Lahti, R.J. 1981. A new and convenient colorimetric determination of inorganic orthophosphate and its application to the assay of inorganic pyrophosphate. Anal. Biochem. 133: 313-317.	
	38.	Heneine, W. and Switzer, W.M. 1996. Highly sensitive and specific polymerase chain reaction assays for detection of baboon and pig cells following xenotransplantation in humans. Transplantation 62: 1360-1362.	
	39.	Higuchi, R. 1989. Simple and rapid preparation of samples for PCR. In PCR technology: principles and applications for DNA amplification. Edited by H.A. Erlich. MacMillan Publishers; Stockton Press. New York. pp. 31-38.	
	40.	Hu, Y., Nakagwa, Y., Purushotham, K.R. and Humphreys-Beher, G. 1992. Functional changes in salivary glands of autoimmune disease-prone NOD mice. Am. J. Physiol. 263: E607-E614.	
	41.	Huang, X. 1996. An improved sequence assembly program. Genomics 33: 21-31.	
	42.	Huang, X. 1999. A contig assembly program based on sensitive detection of fragment overlaps. Genomics 14: 18-25.	
	43.	Huff, W.E., Moore, P.A.J., Waldroup, P.W., Waldroup, J.M., Balog, J.M., Huff, G.R., Rath, N.C., Daniel, T.C. and Raboy, V. 1998. Effect of dietary phytase and high available phosphorus corn on broiler chicken performance. J. Anim. Sci. 77: 1899-1904.	
	44.	Iqbal, T.H., Lewis, K.O. and Cooper, B.T. 1994. Phytase activity in the human and rat small intestine. Gut 35: 1233-1236.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

6

of

10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	45.	Jia, Z., Golovan, S., Ye, Q. and Forsberg, C.W. 1998. Purification, crystallization and preliminary X-ray analysis of the <i>Escherichia coli</i> phytase. Acta Crystallographica D54: 647-649.	
	46.	Kazazian, H.H. Jr. 1999. Mobile elements and disease. Curr.Opin.Genet.Dev. 8: 350.	
	47.	Kim, H.S. and Maeda, N. 1986. Structures of two HaeIII-type genes in the human salivary proline-rich protein multigene family. J.Biol.Chem. 261: 6712-6718.	
	48.	Kohler, G. and Milstein, C. 1976. Derivation of specific antibody-producing tissue culture and tumor lines by cell fusion. Eur.J.Immunol. 7: 511-519.	
	49.	Kozak, M. 1987. At least six nucleotides preceding the AUG initiator codon enhance translation in mammalian cells. J.Mol.Biol. 196: 947-950.	
	50.	Kuchner, O. and Arnold, F.H. 1997. Directed evolution of enzyme catalysts. Trends Biotechnol. 15: 523-530.	
	51.	Laemmli, U.K. 1970. Cleavage of structural proteins during the assembly of the head of bacteriophage T4. Nature 227: 680-685.	
	52.	Lam, J.S., MacDonald, L.A., Lam, M.Y.C., Duchesne, L.G.M. and Southam, G.G. 1987. Production and characterization of monoclonal antibodies against serotype strains of <i>Pseudomonas aeruginosa</i> . Infect.Immun. 55: 1051-1057.	
	53.	Larsen, H.J., Brodersen, C.H. and Hjorth, J.P. 1994. High-level salivary gland expression in transgenic mice. Transgenic Res. 3: 311-316.	
	54.	Laursen, J. and Hjorth, J.P. 1997. A cassette for high-level expression in the mouse salivary glands. Gene 198: 367-372.	
	55.	Levitt, N., Briggs, D., Gil, A. and Proudfoot, N.J. 1989. Definition of an efficient synthetic poly(A) site. Genes Dev. 3: 1019-1025.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 7 of 10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	56.	Lim, D., Golovan, S., Forsberg, C.W. and Jia, Z. 2000. Crystal structures of <i>Escherichia coli</i> phytase and its complex with phytate. Nature Struct.Biol. 7: 108-113.	
	57.	Low, A.G. 1989. Research into the digestive physiology of pigs. In Nutrition and digestive physiology in monogastric farm animals. Edited by E.J. van Weerden and J. Huisman. Pudoc. Wageningen. pp.1-15.	
	58.	Madsen, H.O. and Hjorth, J.P. 1985. Molecular cloning of mouse PSP mRNA. Nucleic Acids Res. 13: 1-13.	
	59.	Mallin, M.A. 2000. Impacts of industrial animal production on rivers and estuaries. American Scientist Jan-Feb.: 26-37.	
	60.	Mehansho, H., Ann, D.K., Butler, L.G., Rogler, J. and Carlson, D.M. 1987. Induction of proline-rich proteins in hamster salivary glands by isoproterenol treatment and an unusual growth inhibition by tannins. J.Biol.Chem. 262: 12344-12350.	
	61.	Menniti, F.S., Oliver, K.G., Putney, J.J.W. and Shears, S.B. 1993. Inositol phosphates and cell signaling: new views of InsP5 and InsP6. Trends Biochem.Sci. 18: 53-56.	
	62.	Mikkelsen, T.R., Brandt, J., Larsen, H.J., Larsen, B.B., Poulsen, K., Ingerslev, J., Din, N. and Hjorth, J.P. 1992. Tissue-specific expression in the salivary glands of transgenic mice. Nucl.Acids Res. 20:2249-2255.	
	63.	Miner, J.R. 1999. Alternatives to minimize the environmental impact of large swine production units. J.Anim.Sci. 77: 440-444.	
	64.	Nakai, K. and Kanehisa, M. 1992. A knowledge base for predicting protein localization sites in eukaryotic cells. Genomics 14: 897-911.	
	65.	Nesterenko, M.V., Tilley, M. and Upton, S.J. 1994. A simple modification of Blum's silver stain method allows for 30 minute detection of proteins in polyacrylamide gels. J. Biochem.Biophys.Methods 28: 239-242.	
	66.	O'Shannessy, D.J., Voorstad, P.J. and Quarles, R.H. 1987. Quantitation of glycoproteins on electroblots using the biotin-streptavidin complex. Anal.Biochem. 163: 204-209.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 8 of 10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	67.	Owerbach, D. and Hjorth, J.P. 1980. Inheritance of a parotid secretory protein in mice and its use in determining salivary amylase quantitative variants. Genetics 95: 129-141.	
	68.	Pen, J., Verwoerd, T.C., Vanparidon, P.A., Beudeker, R.F., Vandenzelen, P.J.M. Geerse, K., Vanderklis, J.D., Versteegh, H.A.J., Vanooyen, A.J.J. and Hoekema, A. 1993. Phytase-containing transgenic seeds as a novel feed additive for improved phosphorus utilization. Biotechnology 11: 811-814.	
	69.	Petitclerc, D., Attal, J., Theron, M.C., Bearzotti, M., Bolifraud, P., Kann, G., Stinnakre, M.G., Pointu, H., Puissant, C. and Houdebine, L.M. 1995. The effect of various introns and transcription terminators on the efficiency of expression vectors in various cultured cell lines and in the mammary gland of transgenic mice. J.Biotechnol. 40: 169-178.	
	70.	Pinkert, C.A., Dyer, T.J., Kooyman, D.L. and Kiehm, D.J. 1990. Characterization of transgenic livestock production. Domest.Anim.Endocrinol 7: 1-18.	
	71.	Quissell, D.O., Barzen, K.A., Redman, R.S., Camden, J.M. and Turner, J.T. 1998. Development and characterization of SV40 immortalized rat parotid acinar cell lines. In Vitro Cell Dev.Biol.-Animal. 34: 58-67.	
	72.	Reddy, N.R., Sathe, S.K. and Salunkhe, D.K. 1982. Phytates in legumes and cereals. In Advances in food chemistry. Edited by C.O. Chichester, E.M. Mrak and G.F. Stewart. Academic Press. New York. pp.1-92.	
	73.	Rozhkov, Y.I. and Galimov, I.R. 1990. Salivary gland polymorphism in pigs and cattle detected by affinity electrophoresis. Anim. Genet. 21: 277-283.	
	74.	Samuelson, L.C. 1996. Transgenic approaches to salivary gland research. Annu.Rev.Physiol.58: 209-229.	
	75.	Shaw, P. and Schibler, U. 1986. Structure and expression of the parotid secretory protein gene of mouse. J.Mol.Biol.192: 567-576.	
	76.	Simons, P.C.M., Versteegh, H.A.J., Jongbloed, A.W., Kemme, P.A., Slump, P., Bos, K.D., Wolters, M.G.E., Beudeker, R.F. and Verschoor, G.J. 1990. Improvement of phosphorus availability by microbial phytase in broilers and pigs. Brit.J.Nutr. 64: 525-540.	
	77.	Smit, A.F.A. 1996. The origin of interspersed repeats in the human genome. Curr.Opin.Genet.Dev.8: 343-350.	
	78.	Stahl, C.H., Han, Y.M., Roneker, K.R., House, W.A. and Lei, X.G. 1999. Phytase improves iron bioavailability for hemoglobin synthesis in young pigs. J.Anim.Sci. 77: 2135-2142.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 9 of 10

Complete if Known

Application Number	09/926/375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	79.	Svendsen, P., Laursen, J., Krogh-Pedersen, H. and Hjorth, J.P. 1998. Novel salivary gland specific binding elements located in the PSP proximal enhancer core. Nuc.Acid Res. 26: 2761-2770.	
	80.	Taboit-Dameron, F., Malassagne, B., Viglietta, C., Puissant, C., Leroux-Coyau, M., Chereau, C., Attal, J., Weill, B. and Houdebine, L.M. 1999. Association of the 5'HS4 sequence of the chicken beta-globin locus control region with human EF1 alpha gene promoter induces ubiquitous and high expression of human CD55 and CD59 cDNAs in transgenic rabbits. Transgenic Res. 8: 223-235.	
	81.	Terada, T. and Nakanuma, Y. 1993. An immunohistochemical survey of amylase isoenzymes in cholangiocarcinoma and hepatocellular carcinoma. Arch.Pathol.Lab.Med. 117: 160-162.	
	82.	Towbin, H. and Staehelin, T.G.J. 1979. Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: Procedure and some applications. Proc.Natl.Acad.Sci.USA 76: 4350-4354.	
	83.	Tryon, A.F. and Bibby, B.G. 1966. Preliminary studies on pig saliva. Arch.Oral Biol. 11: 527-531.	
	84.	Tu, Z.J., Lazowski, K.W., Ehlenfeldt, R.G., Wu, G., Lin, H.H., Kousvelari, E. and Ann, D.K. 1993. Isoproterenol/tannin-dependent R15 expression in transgenic mice is mediated by an upstream parotid control region. Gene Expr. 3: 289-305.	
	85.	Verwoerd, T.C., van Paridon, P.A., van Ooyen, A.J.J., van Lent, J.W.M., Hoekema, A. and Pen, J. 1995. Stable accumulation of <i>Aspergillus niger</i> phytase in transgenic tobacco leaves. Plant Physiol. 109: 1199-1205.	
	86.	Wall, R.J., Hyman, P., Kerr, D., Pintado, B. and Wells, K. 1997. Transgenic animal technology. J.Androl. 18: 236-239.	
	87.	Wall, R.J., Pursel, V.G., Hammer, R.E. and Brinster, R.L. 1985. Development of porcine ova that were centrifuged to permit visualization of pronuclei and nuclei. Biol.Reprod. 32: 645-651.	
	88.	Wessel, D. and Flugge, U.I. 1984. A method for the quantitative recovery of protein in dilute solution in the presence of detergents and lipids. Anal.Biochem. 138: p141-143.	
	89.	Whitelaw, C.B., Archibald, A.L., Harris, S., McClenaghan, M., Simons, J.P. and Clark, A.J. 1991. Targeting expression to the mammary gland: intronic sequences can enhance the efficiency of gene expression in transgenic mice. Transgenic Res. 1: 3-13.	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 10 of 10

Complete if Known

Application Number	09/926,375
Filing Date	04/20/2000
First Named Inventor	Cecil W. Forsberg
Group Art Unit	
Examiner Name	
Attorney Docket Number	6580-270

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	90.	Williamson, C.M., Bramley, A.J. and Lax, A.J. 1994. Expression of the lysostaphin gene of <i>Staphylococcus simulans</i> in a eukaryotic system. Appl.Environ.Microbiol. 60: 771-776.	
	91.	Wodzinski, R.J. and Ullah, A.H.J. 1996. Phytase. Adv.Appl.Microbiol. 42: 263-302.	
	92.	Xiong, Y. and Eickbush, T.H. 1990. Origin and evolution of retroelements based upon their reverse transcriptase sequences. EMBO J. 9: 3353-3362.	
	93.	Selinger, L.B., Forsberg, C.W. and Cheng, K.J. 1996. The Rumen: A Unique Source of Enzymes for Enhancing Livestock Production. Anaerobe. 2: 263-284.	
	94.	Zhang, J.X., Krell, P.J., Philips, J.P. and Forsberg, C.W. 1997. Expression of a bacterial endo (1-4)- β -glucanase gene in mammalian cells and post translational modification of the gene product. Biochimica et Biophysica Acta. 1357: 215-224.	
	95.	Database EMBL 'Online! ID: AF062078, 18 May 1998. Dennis et al.: "Cloning vector p34s-Cm"	
	96.	Database EMBL 'Online! ID: MMPSPG, 3 November 1992. Mikkelsen: "M. musculus Psp gene for parotid secretory protein"	
	97.	Database EMBL 'Online! ID: BLCAT3DNA, 26 February 1992. Luckow: "Plasmid pBLCAT3 gene for beta-lactamase and CAT gene for chloramphenicol acetyltransferase"	
	98.	Database EMBL 'Online! ID: MMU73190, 4 November 1996. Laursen et al.: "Mus musculus positive acting regulatory region of the parotid secretory protein (PSP) gene"	
	99.	Database EMBL 'Online! ID: CVCATBLA, 24 January 1992. Boshart et al.: "Cloning vector pBLCAT6 encoding chloramphenicol acetyltransferase (CAT) and beta-lactamase (bla) genes"	
	100.	Database EMBL 'Online! ID: RNRP15, 12 May 1991. Lin et al.: "Rat salivary protein-rich protein (RP15) gene"	
	101.	Database EMBL 'Online! ID ECAPPAA, 5 February 1991. Dassa et al.: "E. Coli periplasmic phosphoanhydride phosphohydrolase (appA) gene"	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

SEP 03 2002

TECH CENTER 1600/2900